

**To:** R8 GKM Leadership Team[R8\_GKM\_LeadershipTeam@epa.gov]  
**From:** Peterson, Cynthia  
**Sent:** Fri 10/23/2015 9:08:39 PM  
**Subject:** FW: [Citizen Name/Ex. 6] from Silverton writes

All – to discuss at Monday GKM LT meeting.

Please review this response to the request for information from [Citizen Name/Ex. 6] below. Deb McKean and Martin have weighed in on this.

Thanks!

Cynthia

*In evaluating soils for contamination with heavy metals, a number of factors are considered in establishing site-specific concentrations that would prompt human health concerns and/or warrant additional investigation. The EPA is currently consulting with the Town of Silverton about a potential initial sampling effort that will inform decision making. It is premature to establish site-specific criteria at this time.*

Cynthia Peterson

Community Involvement Coordinator

Public Affairs and Community Involvement

U.S. Environmental Protection Agency, Region VIII

1595 Wynkoop St. (8OC-PAI)

Denver, CO 80202-1129

303-312-6879 -- direct dial

**From:** Dhieux, Joyel  
**Sent:** Tuesday, October 13, 2015 2:29 PM  
**To:** Peterson, Cynthia

**Subject:** FW: [Citizen Name/Ex. 6] from Silverton writes

Hi Cynthia,

I am back in the office this week. I'm not sure what the status is of the response to this gentleman, but please let me know if you need any additional information. I have been working with Steve Way and Liz Fagen on the soil sampling proposal. We had initially hoped to conduct the sampling this fall with the approval of the Town of Silverton, but as you might imagine we've been too busy to pursue it. I'm not sure the Town has even had an opportunity to fully vet and approve the proposal. At this point, I wouldn't expect the soil sampling to be conducted until next year.

Joyel

.....

Joyel R. Dhieux

Federal On-Scene Coordinator

U.S. EPA Region 8

Ph: 303-312-6647

Cell: 720-441-9961

**From:** Fagen, Elizabeth

**Sent:** Tuesday, October 06, 2015 10:04 AM

**To:** Dhieux, Joyel

**Cc:** Wharton, Steve; Schmittiel, Paula; Peterson, Cynthia

**Subject:** FW: [Citizen Name/Ex. 6] from Silverton writes

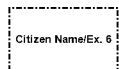
Hi Joyel,

We received the below email from a concerned citizen. I would like to be responsive to his

question. What is your understanding about how remedial/removal will address the questions that come in? Below is a draft response to the gentleman's question. But let us know if you would like to respond to him and what the chain of vetting the response should be.

I hope you're doing well!

Liz



*The EPA has a national policy for evaluating risk from lead in residential soils, which results in a default screening level for lead in residential soil of 400 ppm (parts per million). This same policy also encourages the collection of site-specific information to inform the exact cleanup level that is appropriate for each site's conditions. EPA has also developed generic risk based screening levels for different exposure pathways. <http://www2.epa.gov/risk/risk-based-screening-table-generic-tables>*

*Final cleanup levels may be higher or lower than screening levels established on limited site data. Until the EPA determines that there are enough data to calculate site-specific cleanup levels for the Site, the EPA is establishing preliminary residential soil screening levels of 400 ppm for lead and 11 ppm for arsenic[1]. The EPA generally considers results below these screening levels to be protective for everyone living at a given property including the most sensitive groups: children, women of child-bearing age and pregnant women. Results above a screening level do not automatically indicate a cause for concern.*

*[https://www.colorado.gov/pacific/sites/default/files/HM\\_arsenic-in-soil-risk-mgt.pdf](https://www.colorado.gov/pacific/sites/default/files/HM_arsenic-in-soil-risk-mgt.pdf)*

*Please let us know if you have additional questions.*

Liz Fagen, P.E.

Environmental Engineer

US EPA Superfund Project Manager

(303) 312-6095

EPA Region 8

1595 Wynkoop St., Denver, CO 80202

**From:** Schmittdiel, Paula

**Sent:** Monday, October 05, 2015 4:33 PM

**To:** Fagen, Elizabeth

**Subject:** FW: [Citizen Name/Ex. 6] from Silverton writes

Can you respond to [Citizen Name/Ex. 6] Q? Thanks.

Paula Schmittdiel

Remedial Project Manager

U.S. Environmental Protection Agency

1595 Wynkoop St.

Denver, CO 80202

Office: 303-312-6861

Fax: 303-312-7151

Cell: 720-951-0795

**From:** Citizen Name/Ex. 6 [mailto:Personal Email/Ex. 6]  
**Sent:** Thursday, October 01, 2015 8:48 AM  
**To:** Schmittdiel, Paula  
**Subject:** Re: John Wright from Silverton writes

Good morning, Paula.

For the elements listed below under item #5 of your e-mail, what are the concentrations of each that might be found from a 5-point soil composite sample that would prompt concern for human exposure to heavy metals from mining related activities, and perhaps call for further sampling such as by coring as described in item #3?

Perhaps you could indicate those concentrations by reply e-mail imbedded into this list?

Al

Be

Ca

Cr

Cu

Fe

Mg

Mn

Zn

Sb

As

Cd

Pb

Ni

Se

Ag

TI

Hg

Thank you,

Citizen Name/Ex. 6

Citizen Name/Ex. 6

Personal Address/Ex. 6

Personal Phone/Ex. 6

**From:** "Schmittziel, Paula" <Schmittziel.Paula@epa.gov>

**Date:** Monday, March 30, 2015 3:27 PM

**To:** Citizen Name/Ex. 6 <Personal Email/Ex. 6>

**Cc:** "Peterson, Cynthia" <Peterson.Cynthia@epa.gov>, "Fagen, Elizabeth" <Fagen.Elizabeth@epa.gov>, "Wharton, Steve" <Wharton.Steve@epa.gov>

**Subject:** RE: John Wright from Silverton writes

Citizen Name/Ex. 6 – I will send you the link to the USGS paper that the images are from in a separate email.  
But I can answer your questions about the soils sampling right now.

1. When EPA collects soil samples in urban/residential areas it is to evaluate the potential for human exposure to heavy metals from mining related activities – material handling of ore,

milling and smelting. Our sampling procedure is to collect a 5 point soil composite sample from all areas of the property in the 0-2 inches.

2. The exact number of samples will vary depending on if the property is greater than 5000 sq ft or less than 5000 sq. ft.

3. We also collect a core samples that is divided into 3 samples – 0-6 inches, 6-12 inches and 12-18 inches to determine if there is contamination at depth. Additional samples can be collected from the drip zone around the house.

4. Samples are analyzed using XRF (X-ray Fluorescence) and are also sent to a lab for wet chemistry analysis. Samples sent to a lab are analyzed using methods SE-846, Method 7473 and methods 200.7 and 200.8. Samples analyzed by XRF use method 6200 for field portable XRF instrumentation.

5. For historical mining districts such as the Upper Animas watershed including Silverton, EPA analyzes the full suite of heavy metals including aluminum, beryllium, calcium, chromium, copper, iron, magnesium, manganese, zinc, antimony, arsenic, cadmium, lead, nickel, selenium, silver, thallium and mercury.

Paula Schmittdiel

Remedial Project Manager

U.S. Environmental Protection Agency

1595 Wynkoop St.

Denver, CO 80202

Office: 303-312-6861

Fax: 303-312-7151

Cell: 720-951-0795

**From:** Citizen Name/Ex. 6 [Personal Email/Ex. 6]  
**Sent:** Monday, March 30, 2015 12:53 PM  
**To:** Schmittdiel, Paula  
**Subject:** Citizen Name/Ex. 6 from Silverton writes

Greetings, Ms Schmittdiel.

I missed your presentation to the Silverton Board of Trustees for having been out of town, and only caught up with the matter on my return and a chance to read the local newspaper's reportage.

The image that accompanied the newspaper, described as an enhanced aerial photo indicating possible metal contaminated sites in and around Silverton, was indistinct. Do you have a high-resolution image(s) of same that you could transmit to me via e-mail, along with pertinent legend(s)?

Also, the newspaper account explains you (i.e. EPA) would like to conduct some initial soil sampling around town. Would you describe for me the following:

1. Type of initial sampling and depth (I presume soil cores, or backhoe ditch... to what depth?)
2. Sample assay/analysis method
3. Particular elements of interest or concern

Hope my request for information is not too burdensome, but equally hoping you can accommodate.

Thank you,

Citizen Name/Ex. 6

**Citizen Name/Ex. 6**

**Personal Address/Ex. 6**

**Personal Phone/Ex. 6**

---

---

---

[1] [https://www.colorado.gov/pacific/sites/default/files/HM\\_arsenic-in-soil-risk-mgt.pdf](https://www.colorado.gov/pacific/sites/default/files/HM_arsenic-in-soil-risk-mgt.pdf)